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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants

Hanno Wild et al

Serial No.

08/765,012

Filed

December 19, 1996

For

HIL-4 MUTANT PROTEINS USED AS ANTAGONISTS OR

PARTIAL AGONISTS OF HUMAN INTERLEUKIN 4

Art Unit

1806

Examiner

G. Bansal

June 23, 1997

Hon. Assistant Commissioner for Patents

Washington, D. C. 20231

Sir:

INFORMATION DISCLOSURE STATEMENT

In accordance with 37 CFR § 1.56 and § 1.97(b), Applicants wish to call the attention of the Examiner to the references listed below:

1.	U.S. 5,538,884	07/23/96	Dörreich et al
2.	U.S. 4,640,835	02/03/87	Shimizu et al
3.	U.S. 4,496,689	01/29/85	Mitra
4.	U.S. 4.301.144	11/17/81	lwashita et al

5.	U.S. 4,670,417	06/02/87	lwasaki et al
6.	U.S. 4,791,192	12/13/88	Nakagawa et al
7.	U.S. 4,179,337	12/18/79	Davis et al
8.	U.S. 3,773,919	11/20/73	Boswell et al
9.	U.S. 4,485,045	11/27/84	Regen
10.	U.S. 4,544,545	10/01/85	Ryan et al
11.	U.S. 5,013,556	05/07/91	Woodle et al
12.	U.S. 5,298,410	03/29/94	Phillips et al
13.	U.S. 4,767,628	07/17/90	Hutchinson
14.	U.S. 4,619,794	10/28/86	Hauser
15.	U.S. 4,615,885	10/07/86	Nakagame et al
16.	U.S. 4,590,060	05/20/86	Ehrenfeld
17.	WO 93/10235	05/27/93	World
18.	WO 89/02922	04/06/89	World
19.	WO 87/05330	09/11/87	World
20.	DE 32 18 121	11/17/83	Germany
21.	EP 133 988	03/13/85	Europe
22.	EP 52 322	05/26/82	Europe
23.	EP 36 676	09/30/81	Europe
24.	EP 102 324	03/07/84	Europe
25.	WO 88/04667	06/1988	World

Kruse et al, (1991) FEBS Lett. 286, 58-60

26.

- 27. Kikutani et al, (1986) Cell 47, 657-665
- 28. Yokota et al, (1986) Proc.Natl.Acad.Sci., USA 83, 5894-5898
- 29. Carr et al, Biochemistry 1991, 30 1515-1523
- 30. Weigel et al, (1989) Eur.J.Biochem. 180, 295-300
- 31. Flinta et al, Eur.J.Biochem. 154, 193-196 (1986)
- 32. Cunningham et al, Science, 244, 1081-1085 (1989)
- 33. Aplin et al, CRC Crit.Rev.Biochem., 259-306 (1981)
- 34. Hakkimuddin et al, Arch.Biochem.Biophys., 259:52 (1987)
- 35. Edge et al, Anal.Biochem., 118:131 (1981)
- 36. Win Ping Deng et al, Anal. Biochem. 200:81 (1992)
- 37. Thotakura et al, Meth.Enzymol. 138:350 (1987)
- 38. Duksin et al, J.Biol.Chem., 257:3105 (1982)
- 39. Maxfield et al, Polymer 16:505-509 (1975)
- 40. Bailey et al, Nonionic surfactants [Schick, M.J., Hrsq.] 794-821 (1967)
- 41. Abuchowski et al, J.Biol.Chem. 252:3582-3586 and 3578-3581 (1977)
- 42. Abuchowski et al, Cancer Biochem. Biophys., 7:175-186 (1984)
- 43. Katre et al, Proc.Natl.Acad.Sci., 84:1487-1491 (1987)
- 44. Goodson et al, Biotechnology, 8:343-346 (1990)
- 45. Remington's Pharmaceutical Sciences, 16. Auflage, Osol A., Hrsg. (1980)
 (Complete Book)
- 46. Langer et al, J.Biomed.Mater.Res., 15:267-277 (1981)
- 47. Sidman et al, Biopolymers, 22:547-556 (1983)

- 48. Eppstein et al, Proc.Natl.Acad.Sci. USA, 82:3688-3692 (1985)
- 49. Hwang et al, Proc.Natl.Acad.Sci. USA, 77:4030-4034 (1980)
- 50. Kruse et al, EMBO J. 11, 3237 (1992)
- 51. Kruse et al, EMBO J. 11, 789-790 (1992)

Copies of most of these references are submitted herewith along with Form PTO-1449. Remington's Pharmaceutical Sciences (reference no. 47) is the only reference not being included because it is too large to submit.

The relevance of the listed references is as follows. Reference nos. 12, 17, 25, 50 and 51 were cited in the Search Report issued by the International Patent Office. A copy of this Search Report is also enclosed. For the Examiner's information, the designated "Y" means "particularly relevant if combined with another document of the same category".

The remaining references are cited in the specification of the present application at the following locations:

Reference No.	<u>Page/line</u>
1. Equivalent to DE 42 37 333	Page 2/line 13
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3.	Page 3/line 13 and Page 11/line 31

4.	Page 3/line 13 and Page 11/line 32
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13. Equivalent to EP 58 481	Page 15/line 25
14. Equivalent to EP 88 046	Page 16/line 16
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44.	Page 12/line 20
4 5.	Page 12/line 29 and Page 15/lines 1-2
46.	Page 15/lines 23-24 and 27-28
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The Commissioner is hereby authorized to charge the fee for consideration of this information disclosure statement, which is set forth in § 1.17(p), to Deposit Account No. 02-1445.

Consideration of the foregoing in relation to this application is respectfully requested.

Respectfully submitted,

SPRUNG KRAMER SCHAEFER & BRISCOE

Ву___

/ Kurt G. Briscoe

Reg. No. 33,14

KGB:cg

Enc.: International Search Report

PTO-1449 References (51)

Notice of Change of Firm Name

B9776.IDS

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I hereby certify that this correspondence is being deposited with the United States Postal Services as first class mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231 on June 23, 1997.

SPRUNG KRAMER SCHAEFER & BRISCOE

Date

June 2β, 1997